

RunTime Config DB Meeting notes Mar 27, 2020

Date

27 Mar 2020

Attendees

- Benjamin Cheung
- Tony Finnerty
- Joanne Liu Rudel
- Bruno Sakoto (Bell Canada)
- Ted Johnson
- Zu Qiang (Ericsson)
- Melanie Sater
- Munir Ahmad (Bell Canada)
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ARCH WORK

ARCHITECTURE WORK	WIKI LINK
ARCHITECTURE FLOWS	ARCHCOM: InfoFlow - RunTime Config DB Information Flow
COMPONENT DESCRIPTION	ARC RunTime DB Component Description - R6 Frankfurt
PROJECT PROPOSAL	RunTime Config DB Project Proposal (Oct 25 2019)

DISCUSSION

Topic	Discussion
Calendar Entry	Calendar now open for editing ... but how? Community Meetings & Calendar
R6 CCSDK-based Solution	Project as part of CCSDK (Yuriy Malakov) <input type="checkbox"/> ACTION: Sandeep Shah Presentation of new architecture with CCSDK. <input type="checkbox"/> (DONE): Architecture CCSDK component: ARC Controller Component Description – Frankfurt added in Section 6 System deployment architecture. Separate container. Added to Diagram. Updated Section 7 New Release Capabilities & Linked to U/C page. <input type="checkbox"/> ACTION: Development demo & progress in use on OOF/PCI/SON Use Case. Validation tool & generation of schemas/tables of input conditions of yang model. Basis for Data Model 3GPP TS28.541/28.540. Planned SQL Schema model driven database work. Once we have schema can SDNR update/provision the schema. Can parsing code be model driven. (1) ORAN Yang models & data schema not available yet (waiting) & 5G Service Modeling U/C: 3GPP TS28.541/TS28.540. maps to a data structure we want to support. (2) can proceed to Dockerize solution. R4 MariaDB solution. could extend the model. (3) Review work from Ted. waiting for project.
R7 Project Proposal	RunTime Config DB Project Proposal (Oct 25 2019) Project Proposal work to be done during R6. Project Proposal for R7. Presentation at Arch S/C and TSC during R6. <input type="checkbox"/> ACTION: For Performance (@@#) open items to get ballpark figures for # API requests. <input type="checkbox"/> ACTION: find out the Lifecycle State "enumerations" <input type="checkbox"/> ACTION: Schedule presentation time with TSC. / key points in project proposal that must be addressed for them to be considered as a project. Questions that might be asked that need answer. Mandatory fields filled out. Brian Freeman 20 Mar 2020 Ben sent the TSC asking for slot. 26 Mar 2020 TSC. M4. RC0 bumped by a week. Q1 Who will be contributors. Joanne Catherine. <input type="checkbox"/> ACTION: What is our deadline? April 23. Subcommittee meeting (LA USA). planning virtual plannig / presentations. M0 <input type="checkbox"/> ACTION: Peer Review Process. ONAP Projects ... Ready for PEER REVIEW? What is involved in that? What's the process? submit to the TSC? <input type="checkbox"/> ACTION: who will be contributors, who wants to be the PTL.

<p>R7</p> <p>Separate</p> <p>Component</p>	<p><input type="checkbox"/> ACTION: Find PTL who wants to lead the RTCfgDB Project as independent component.</p> <p>Email from Dan Timoney 14 Nov 2019</p> <p><i>My understanding from Sandeep was that this work was very much a stretch for Frankfurt. So, I'm okay with work starting in Frankfurt, as long as its structured so that it's a separable component (i.e. as long as, if it's not completed in Frankfurt, the platform is not fundamentally broken). I would NOT support creating a separate repository, since there is a fair amount of overhead involved in maintaining each repository on an ongoing basis – both machine and human resources. The Linux Foundation itself has been pushing back on the number of repositories the ONAP projects have and there is now a new approval process needed in order to add new ones. If a new repository is needed, then this team will need to convince me why no existing repository can be used AND will need to provide a resource who is willing to maintain that repository (i.e dealing with security vulnerabilities; policing code coverage ; doing release builds, etc).</i></p>
<p>R7</p> <p>Guilin</p> <p>Content / requirements</p>	<p>Requests for R7 Requirements are up.</p> <p>Guilin release - functional requirements proposed list</p> <p>Timeline - Sign-off for R6 is May 7. Historically M0 kickoff for R7 is May 7th</p> <p>PROPOSALS FOR R7 GUILIN FOR WHAT WE PLAN TO BE DOING IN R7:</p> <ol style="list-style-type: none"> 1. R7 Project Proposal (identify PTL, Project proposal, setup repo) 2. =STEP 0= (Design time), (Setup DB) Yang Model development ORAN specification Yang Model in line with 3GPP. SQL structure. 3. =STEP 0= Schema design/setup & API 4. =STEP 1= CMnotify generated by RanSIM extended (final standard format). 5. =STEP 1= VES generation, Nokia Simulate DU simulate VES CMNotify message. 6. =STEP 1-6= CMNotify (Nokia) Integration Step 2,3,4 with SON work Step 1,5,6 7. =STEP 5/6= Mapping CMnotify contents into DB 8. =STEP 5a= New Development for Independent component to get VES off of DMaaP 9. =STEP 6= API Updates 10. =STEP 6= Interface to RTCDB (writing DB from SDN-R or RCDB-stand-alone-component) <p><u>SUMMARY OF THE STEPS FOR RTCDB "HOW IT OPERATES" (Reference):</u></p> <ul style="list-style-type: none"> • STEP 0: Design time, Setup DB schema & API (Onboarding). • STEP 1: xNF (RAN Simulator) GENERATES a VES CMNotify - Wipro SON (R6 Done) • STEP 1a: Simulator of VES CMNotify (Nokia) (R7) • STEP 2: DCAE VES Collector RECEIVES the CMNotify (VES) - Nokia (R7) • STEP 3: DCAE PROCESSES VES Event- Nokia (R7) • STEP 4: DCAE PUBLISHES onto DMaaP - Nokia (R7) • STEP 5: CCSDK (Controller) LISTENS to DMaaP - Sandeep Shah (R6 Done) (R7) • STEP 5a: RTCDB (stand-alone component) LISTENS to DMaaP (R7 new) • STEP 6: RTCfgDB UPDATES DB with info - Sandeep Shah / Techmahindra (R6 Done) (R7) <p><u>A&AI FLOWS:</u></p> <p>STEP 1...6: Initial A&AI setup of DB (the setup of the DB with the initial set of all xNFs a "getall")</p> <p>STEP 1...6: A&AI Update (e.g. a new xNF is added or deleted)</p>

Renaming the Project	<p>RENAMING THE PROJECT ("Service" vs "Database")</p> <p>Database</p> <p>#1 HISTORICAL PRECEDENCE - The original idea was a configuration database available at Runtime. Use cases to store. Historical been with the project since the beginning. <i>Name Inertia</i>. Operators will use. Historical precedence within AT&T.</p> <p>#2 Contents that it holds - Contents is configuration parameters from the network. Name reflects the initial content of database.</p> <p>Service</p> <p>Since working on project proposal, it has grown, the same argument works against use.</p> <p>#1 QUALIFIERS - A wide variety of qualifiers could be put there and it still won't cover. Would move to something more abstract. Above and beyond a standard IT database. For example service information, policy information, CLAMP information, exo-inventory (information outside of A&AI), topology information, application information - it is conceivable that many other types of information could be before. Config if someone wants to add additional information a place to hold information. e.g. in Bell Canada's case they store more than just configuration, the Operational Data & Current state of network. Collectors that gather metrics in VES consumed put in stateDB. Tied to inventory objects in A&AI self-link from A&AI want to know about interface PNF trying to keep two together, the configuration & the metrics representative what is currently happening in the network. state of I/F being up-down that's more of a state vs a configuration. OpenDaylight Operational data store. Scalability. Collectors & StateDB is yang-driven if collector follows yang-model data store can hold-values.</p> <p>#2 Confederation of Databases - Core/Edge/Far Edge - Historical DB current DB</p> <p>#3 MEANS VS ENDS - Database is a "means" technology not an "end" goal</p> <p>An engine, hubcap is a part of a automobile that provides a service: vehicular motion. A database is a specific technology and implementation.</p> <p>Requirements around for current data & historical (temporal) careful not to talk about the technology. Potentially more than one database.</p> <p>Data Persistency Service "functional"</p> <p>Data Layer Service</p> <p>Run-Time Configuration DataBase "technology"</p> <p>State (of Network) Database what is state of network (storing more than just config)</p> <p>Configuration Operations Database (C.Op.DB) / Swami</p> <p>Golden Configuration Database / Fred</p> <p>RunTime Policy Topology State Configuration Service Exo-Inventory Database</p>
R7 GuiLin Development	<p>CMNotify specification</p> <ul style="list-style-type: none"> <input type="checkbox"/> ACTION: R7 CMNotify VES Review https://gerrit.onap.org/r/c/vnfrqts/requirements/+/100876 (VES Event Reg review) and https://gerrit.onap.org/r/c/vnfrqts/requirements/+/100867 (VES Event Listener review) VES 7.1 review. Trevor processing comments. Reviewers want= to see reworked document. <input type="checkbox"/> ACTION: R7 Common Header - David Smith calling meeting talk about how to harmonize / modify common header to deal with notifications to standard bodies. SA5 taken action defining VES events (not good). ONAP should control population of common header. SA5 to change info (CR). Meeting for a high level proposal. Nokia/ ATT/ Orange/ Ericsson. Working towards presentation to ONAP. 3GPP solution to submit CR. Vimal, Marge, Cormac, Damian. NEXT STEP: Follow up call. Deadline: in time for R7. <input type="checkbox"/> TSC - Ask for TSC presentation Slot. Thursday 10AM EDT. Present the Project Proposal.
Comment made on 16 Mar 2020	<p>1. (CLOSED) Vendor/SP may have an independent database (outside of ONAP) that they may wish to "sync" up with the RTCDB. Data in that independent DB maybe overlapping information. Store directly data inside of one data-lake already used by the SP. SP already has an existing Data lake use that instead of RTCDB. UPDATE: The proj. proposal does (1) have a section on synchronization (2) facade I/F</p> <p>Alessandro Gerardo D'Alessandro</p>

SUPPORTING FILES

Description	File

RECORDING

Recording	File
Zoom	<div> zoom_0.mp4</div>
Audio Only	<div> audio_only.m4a</div>
Chat	<div> playback.m3u</div>

Action items



